

## ***Abstract***

A system, method, and computer program product for creating and using stateful web applications are described. A web-based computing environment manages the execution of web programs such that the environment causes a web program to terminate if it executes one of a set of program-terminating statements. A control program receives an application definition expressed as a plurality of statements, including at least one of said program-terminating statements. The control program receives a request to execute the application definition and identifies whether the request to execute corresponds to an existing application session. If the request to execute does not correspond to an existing application session, implicit application session state including initializing a program pointer to identify a first statement in the application definition to execute is initialized. If the request to execute corresponds to an existing application session, implicit application session state is restored from a storage location. The control program causes the execution of the statements in the application definition and in connection therewith maintains implicit application session state. The implicit application session state is stored to a storage location before execution of any statements of the set of program-terminating statements, so that a subsequent request to execute the application definition may continue execution of the same application session.